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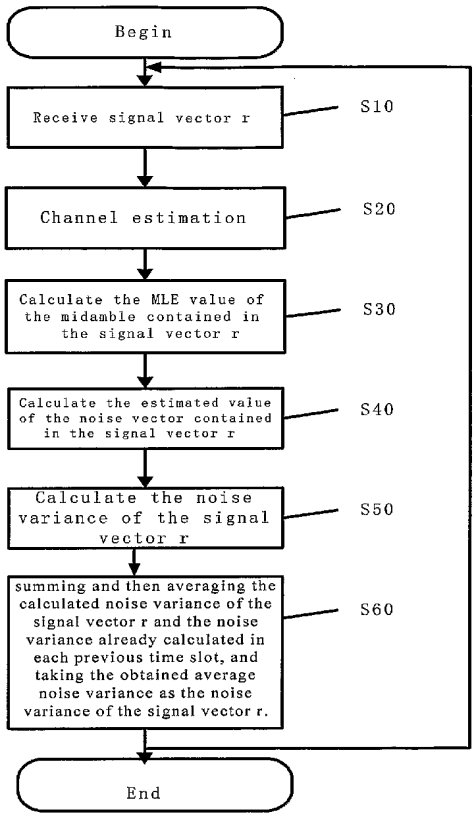
(54) Title: METHOD AND APPARATUS OF NOISE VARIANCE ESTIMATION FOR USE IN WIRELESS COMMUNICATION SYSTEMS



(57) Abstract: A method of noise variance estimation to be performed by a user equipment is proposed, comprising steps of: receiving a signal vector containing training sequence and noise vector transmitted via at least one transmission path; estimating the channel impulse response of each transmission path to construct a channel impulse response matrix, according to the signal vector; calculating the noise variance of the signal vector according to the channel impulse response matrix and the signal vector if the channel impulse response remains mainly unchanged during the special time duration of the training sequence.

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